EIA 2008 Energy Conference: 30 years of Energy Information and Analysis
April 7 – 8th, 2008
April 7, Plenary Session
Dr. James Schlesinger, former Energy Secretary

Thank you so much Guy. He has been with us since 1977, with some interruptions, to work for Pennzoil and other such organizations. And thank you Mr. Secretary, for your remarks, particularly reminding us: technology, technology, technology. I'm delighted to be here today. I thank you for the invitation, and I congratulate the members of EIA on their 30th birthday. This, for me, is a walk down memory lane. It inspires some nostalgia but, as they say, even nostalgia ain't what it used to be.

I'm going to talk about three points. First, America's historical good fortune with regard to natural resources. Second, I'll talk about the 1973 crisis and its consequences. And third, very briefly because Dan Yergin will talk about it subsequently, the future of EIA.

First, historically, America's abundance of natural resources has meant it has had an easy time with energy. Unlike other leading powers, it has not ever had to worry, until recently, about energy supplies. Britain, when it shifted to oil, had to worry about its supply lines to the Persian Gulf, as we do today, and it referred to this as its lifeline to the East. Japan worried about its energy supplies, and it was one of the causes for its attack on Pearl Harbor. Germany and France fought over the coal supplies of Lorraine in three different wars. The U.S. was largely unaware of these problems of energy security. It was, if I may say so, a misfortune of the fortunate.

In World War Two, as was said, we floated to victory on a sea of oil, mostly supplied by the United States. At the time of the Suez Crisis, in 1956, there was sufficient shut-in capacity in the state of Texas so that we could go take care of our allies, after they suffered an embargo and the closure of the Suez Canal. But by the 1960's, that shut-in capacity had melted away. And our growing oil dependency was forcefully brought to our attention 25 years ago, by the Arab Oil Embargo.

Subsequent attempts to ensure energy security and energy independence, for example, were first touted in 1973, right after the start of the oil embargo. A few months later, we published the blue print, a predecessor of the DOE, published the blue print for America's self-sufficiency by 1980. In 1973, we imported 3 million barrels of oil a day. By 1980, the terminal year of that blue print, crude oil imports had increased by 60 percent and today, they are three times as large.

So if we were seeking energy independence then, we are off on the wrong track. I should remind you also, that in the quest for energy security, that those three administrations, Nixon, Ford, and Carter, all thought of coal as the basis, and as we know today, coal is under something of a cloud.

Let me turn now to the wake-up call of 1973. The embargo that resulted from the Middle Eastern war, which King Faisel joined only reluctantly after our decision to increase financial aid to Israel and the pressures within the Arab community became overwhelming. That Arab Oil Embargo came upon a nation that was unsuspecting, not to say ignorant. Power had gradually been shifting away from the international oil companies, and particularly the Seven Sisters that had played a role in stabilizing oil supply and prices. And the dependency of the entire outside world, including the United States, on the Middle East was growing, which increased the power of the Middle Eastern nations.

Certain events marked that shift of power. OPEC's founding in 1960, and then, perhaps notably, the Occidental Oil deal with Libya in 1969. There was the reality of growing dependency, but it was not visible to the public. The embargo should have made it instantly visible. Instead, shortages, gas lines, and OPEC's quadrupling of prices generated bitter controversy in this country as to who was to blame. Since it was OPEC that called the embargo, the answer to that question should have been clear. And those events did not help the image of the Arab States in this country.

But the search was for a domestic villain, and the oil companies, especially Big Oil, fitted the bill, with continuing echoes to this day. Public opinion, or more precisely, public knowledge, of these issues was weak. Most in this country, according to poles, did not realize that we imported any oil at all and believed that the U.S. resources were sufficient. Others believed all one had to do was drill down into the ground and the oil would come up. The many aware that we had imported oil believed that imports were simply the preference of Big Oil, which was probably in cahoots with the OPEC countries. And at the time, the rumors were that there were tankers being held off our major ports until prices domestically would rise. That particular rumor has an ancient lineage: in ancient Rome, when bread prices rose, and the public became angry, rumors would spread that there were grain ships waiting outside the port of Ostia, which was the port of Rome, until the price of bread increased.

Domestically, the disputes were not simply partisan, but they were disputes between the consumer states and the producer states. Price controls at the time, led to a blow-back from the producing states. Bumper stickers were widely displayed in Texas and elsewhere: "Let the Yankees freeze in the dark." That

sounds like the last shot in the War Between the States. But, those bumper stickers and the protests were to little avail, because there were more consumers than producers.

Energy prices and energy vulnerability was a central issue in the '76 campaign. Jimmy Carter promised quick action, 90 days to an energy plan and the establishment of the Department of Energy. The establishment of the DOE had been contemplated earlier, incidentally, by the Ford administration. There was no problem about creating the Department of Energy. The Organization Act for DOE was quickly and overwhelmingly approved. Questions only came later on the part of some who professed that all energy problems could be easily handled by the market.

Today, we should remember that central to the DOE's creation was the Energy Information Administration. A phrase coined originally by Disraeli, the British Prime Minister was altered, three types of lies: lies, damn lies, and energy lies. Since all information came from the energy industries, they had to be self-serving lies. There was a need for an authoritative, truthful and independent source. The Energy Information Administration was a crucial part of the Organization Act. I should add that the API, the American Petroleum Institute, was delighted to get out of the line of fire, and quite happily handed over the baton to the EIA.

The EIA had to be independent and above reproach. Its information had to be seen as authentic, so I chose as the first administrator Lincoln Moses, an imminent statistician and a professor of statistics at Stanford. And EIA, more or less, has lived happily ever after. I might add, that if we did not have EIA, and we continued in the current atmosphere, to depend upon the energy industry to provide statistics, that there would be additional controversy.

Let me close by my third subject: a brief look ahead. In the past, projected supply has always exceeded demand. This is not only true of oil, it has also been true of coal. And there has been in the past a need for a mechanism to restrain over-production, or what many call waste. These included such mechanisms as: the unitization of oil fields per rationing, the Texas Railroad Commission, and the Interstate Oil Compact in this country. Internationally, we have seen the Seven Sisters play that stabilizing role, and in more recent years, OPEC.

But, in the last few years, unlike the earlier years, supply has had trouble keeping up with demand. Demand exceeds supply. In 2004, as was mentioned by Secretary Bodman, we saw a substantial run-up in prices, which was the first demand-driven increase in the price level without a supply interruption. The EIA tells us that by the year 2030 something on the order of 80 percent of our energy supply will still be fossil fuels.

So I want to read you a paragraph from a book by Charles Darwin (not the biologist: this is Charles Galton Darwin, his grandson, and he is a physicist) called, "The Next Million Years," which some 55 years ago made a tremendous impression on me:

> "A thing that will assume enormous importance quite soon is the exhaustion of our fuel resources. Coal and oil have been accumulating in the Earth for over 500 million years, and at the present rates of demand for mechanical power,"

this is 50 years ago,

> "the estimates are that the oil will all be gone in about a century, and coal in a good deal less than 500 years."

For the present purpose, it does not matter if these are underestimates. They could be doubled or tripled and still not affect the argument. Whether you agree with the recent study authorized by Secretary Bodman by the National Petroleum Council that by the early 20's we will be facing a plateau because of a lack of access to additional oil supplies, or whether you agree with the peakists who believe, that for geological reasons, we will soon reach the point of exhaustion of the ability to increase the supply of oil, does not really matter. At some point, during the decades immediately ahead, we will face a constraint on oil production. We will hit a plateau, and that this will have a tremendous shock, both economically and perhaps politically, so we had best prepare.

The reason for my mentioning it here is that EIA's models, historically, have tended to be demand-driven. As demand rises, supply increases to meet it. The question for EIA, and for all of you will, will this be appropriate in the future? What kind of adjustments should be made? Thank you very much.